

COLORADO DISCHARGE PERMIT SYSTEM (CDPS)
FACT SHEET TO MODIFICATION 2
PERMIT NUMBER CO0024431
EAGLE RIVER WATER AND SANITATION DISTRICT, AVON WWTF

EAGLE COUNTY

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I. TYPE OF PERMIT

- | | |
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| A. Permit Type: | Minor Amendment |
| B. Discharge To: | Surface Water |

II. FACILITY INFORMATION

- | | |
|------------------------------------|---|
| A. SIC Code: | 4952 Sewerage Systems |
| B. Facility Classification: | Class A per Section 100.6.2 of the <u>Water and Wastewater Facility Operator Certification Requirements</u> |
| C. Facility Location: | 950 W. Beaver Creek Blvd. Avon,, CO 81620, Latitude: 39.635556 N, Longitude: 106.53111 W |
| D. Permitted Features: | Outfall 001A, Internal Outfall, following disinfection and prior to mixing with the receiving stream, 39°38'7.26"N, 106°31'52.441" W Outfall 002A, 39°38'7.26"N, 106°31'51.15W Outfall 003A, 39.635556°N, 106.53111°W |

III. PURPOSE OF MODIFICATION

The Division received permit modification letter from the facility on October 17, 2012. The letter requested three modifications to the permit:

1. Request to modify the total inorganic nitrogen limit to 36 mg/L per Division authorization in its letter dated July 9, 2012 (refer to letter from LRE)
2. Request to reduce monitoring frequency for copper from monthly to quarterly per WQCD Policy No. WQP-20 (refer to letter from LRE).
3. Request to reduce monitoring frequency for uranium from bi-monthly to quarterly, per WQCD Policy No. WQP-20 (refer to letter from LRE).

The referenced LRE letter is an accompanying letter to the modification request. The letter details the supporting analysis for the modifications requested. The letter also requests state buy-in for use of the QUAL2K model to support Eagle River Basin Watershed planning, management and regulatory-based decisions.

IV. CHANGES TO PERMIT

1. The Division calculated the inorganic nitrogen limitation (NIL) for the facility modeling together with both Edwards WWTF and Eagle WWTF. However, a letter to the Division from the facility indicated that the Eagle WWTF does not withdraw its drinking water from the Eagle River and therefore, its discharge should have been excluded from NIL calculations. The Division verified that the drinking water source for the Town of Eagle is Brush Creek. Therefore, the Division concluded that the exclusion of Eagle WWTF discharge from the modeling is appropriate. The Division conducted

a mass-balance equation (not setting a fixed level) which resulted in a 32 mg/l of TIN for the Avon facility and accordingly 41.6 mg/l of TIN for the Edwards facility, after the Eagle WWTF was also removed from the modeling. After discussions with the facility's consultants, the Division agreed to accommodate the District's request for pollutant trading and allocated a TIN limitation of 36 mg/l for each facility. At this time, Division believes that these limits are protective considering the Eagle River is a gaining stream.

| Parameter | M _{WQS} | Q _A | M _A | Q _R | M _R | Q _{LC} | M _{LC} | Q _E | M _E |
|-----------|------------------|----------------|----------------|----------------|----------------|-----------------|-----------------|----------------|----------------|
| TIN | 10 | 6.7 | 36 | 26 | 0.57 | 7.99 | 0.57 | 4.6 | 36 |

where,

M_E = total assimilative capacity for the Edwards facility, and a portion of the Eagle WWTF

Q_T = total downstream flow including the Eagle River and Lake Creek low flows and the Edwards and Avon facilities

M_{WQS} = water quality standard

Q_A (cfs)= design flow of the Avon facility

M_A = assimilative capacity allocated to Avon above

Q_R = river low flow

M_R = ambient water quality of the river

Q_{LC} = Lake Creek low flow

M_{LC} = Lake Creek ambient quality (set equal to the ambient river quality)

Q_E = design flow of the Edwards facility

It should be noted that the Division will maintain the compliance schedule for the facility since the limit above is more stringent than previous permit limit.

- The Division looked that the calculations and the reduced monitoring results and agrees with the request for reduced monitoring. The facility is eligible for a 2-level monitoring reduction (WQP-20) and only received 1-level reduction. Therefore, the monitoring requirement has been reduced to 'Quarterly'.
- The facility also requested monitoring reduction for uranium, from bi-monthly to quarterly, providing evidence that the highest uranium concentration in the discharge was 1.05 ug/l.

| <i>Parameter</i> | <i># Samples or Reporting Periods</i> | <i>Reported Average Concentrations Avg/Min/Max</i> | <i>Reported Maximum Concentrations Avg/Min/Max</i> | <i>Previous Avg/Max/AD Permit Limit</i> | <i>Number of Limit Excursions</i> |
|------------------|---|--|--|---|---|
| U, PD (µg/l) | 20 | 0.36/0.1/0.92 | 0.44/0.2/1.1 | Report/Report | |

The ICIS data summarized from February 2011 to October 2012 shown that the highest sample result of 1.05 ug/l is correct. Note that this result is significantly lower than the stream standard of 30 ug/l for domestic water supply. Therefore, the Division conducted a qualitative reasonable potential analysis resulting in a no RP determination. As a result, the Division removed the uranium monitoring requirement from the permit.

The Division believes that the state buy-in for use of QUAL2K model to support Eagle River Basin Watershed planning, management and regulatory-based decisions is not a permit modification issue therefore, it is not addressed.

Kenan Diker
November 1, 2012

V. PUBLIC NOTICE COMMENTS

The public notice period was from November 16, 2012 to December 17, 2012. No comments were received during the public notice period.

Kenan Diker
December 17, 2012